BOX AF

CL/V-19623/A/CVE42

#7 16 5-28-96

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	HAGMANN ET AL.	ART UNIT:	1307
SERIAL NO.:	08/274,942	EXAMINER:	M. VARGOT
FILED ON:	JULY 14, 1994		
FOR:	A PROCESS AND DEVICE FOR THE MANUFACTURE OF MOULDINGS AND MOULDINGS MANUFACTURED IN ACCORDANCE WITH THAT PROCESS		

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelop addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

ANN BRAYLEY Date: 5/16/96 Signature: Ann Brayley
(Type or print name of party mailing paper)

Honorable Assistant Commissioner for Patents
Washington, DC 20231

FWDX 05/28/96

RESPONSE AFTER FINAL

Sir:

Remarks

In response to the final Office Action dated April 16, 1996, Applicants request reconsideration and withdrawal of the rejections set-forth in the Office Action in view of following remarks.

Claims 1-4, 8-40, 42-61 and 63-81 stand rejected under 35 U.S.C. § 103 as being unpatentable over Clark, and Claim 5 stands rejected under 35 U.S.C. § 103 as being

unpatentable over Clark in view of EP 484,015. The Examiner stated that the edge contour of the moulded article is determined substantially by the energy impingement in the process of Clark and maintains that if desired, producing a moulded article with no burr and flash with Clark's process would have been obvious.

Applicants respectfully disagree with the Examiner's statement. There is no disclosure or suggestion in Clark that the edge of the moulded article is determined by the energy impingement of its process. To the contrary, the edge of Clark's lens is patterned by the annular restriction portion of the matching male and female moulds, which restriction portion is formed just below the reservoir. See, for example, column 6, lines 9-21, of Clark. The reservoir either holds an excess amount of the lens-forming material to supply the lens forming chamber if the material shrinks while being polymerized or provides an overflow space for the lens-forming material if the material expands while being polymerized.

Clark teaches a two-step lens polymerizing process. First, Clark places a diaphragm, which has a diameter smaller than the diameter of the lens being cast, to avoid the polymerizing radiation from reaching the restriction portion and the reservoir of the mould such that the lens-forming material at the restriction portion and the reservoir is not polymerized. Then, the diaphragm is removed to allow the lens-forming material in the restriction portion and the reservoir to polymerize. The two-step process was necessitated by the fact that the lens-forming material either shrinks or expands while being polymerized. If the mould is exposed to the polymerizing radiation without the diaphragm, the thin dimension of the restriction portion will allow the lens-forming material in the portion to polymerize completely before the lens-forming material in the center of the lens polymerizes, thereby defeating the accommodating function of the reservoir and forming malformed lenses. Applicants submit that there is no recognition or suggestion whatsoever in Clark that controlling the area and direction of impingement of the polymerizing radiation alone can provide any useful utilities other than discouraging polymerization at the restriction portion and the reservoir.

Additionally, Clark requires at least one additional step to produce its moulded article. According to Clark, after the lens-forming material is fully polymerized, the polymerized lens in the mould is further processed to remove the polymerized lens-forming material around the edge, i.e., flash. See, for example, column 8, lines 47-52. Although the Examiner alleged that Clark at column 7, lines 46-55, discloses the formation of the flash as a preferred embodiment and not as

a requirement, Applicants respectfully disagree. Applicants submit that the Examiner is mischaracterizing the disclosure. The cited portion of Clark merely deals with the lens-forming material in the reservoir. Therefore, there is no question that the lens-forming material in the restriction portion of the mould is polymerized. As can be seen from, for example, FIG.2 of Clark, the restriction portion forms a flat rim around the lens, and thus, the rim must be removed to properly create the edge of the lens in order to produce a useable lens. Applicants submit that in Clark's process, edge flash is necessarily formed and must be removed.

The present invention is different from Clark in at least two aspects. First, the edge of the molded article is fully and precisely formed by controlling the direction and area of impingement of the crosslinking radiation alone, and thus, there is no secondary step to remove edge flash. Second, the present invention accommodates and solves the shrinkage or expansion problem of the crosslinkable material entirely differently than Clark's approach. In accordance with the present invention, the mould is produced such that the area outside the outer contour of the moulded article being cast is at least partially impermeable to the crosslinking radiation, masking the crosslinkable material in the restriction portion of the mould from the radiation. Therefore, the crosslinkable material in the restriction portion of the mould is not crosslinked, and the crosslinkable material can move in or out of the mould as the material is being crosslinked only in the exposed area. Accordingly, the unique crosslinking approach of the present invention not only produces a moulded article having a cleanly defined edge without requiring a secondary step, but also accommodates the shrinkage and expansion of the crosslinkable material without using a cumbersome multi-step process such as the one disclosed in Clark.

Applicants submit that the Examiner has not established a *prima facie* case of obviousness. It is well established in patent law that a *prima facie* case of obviousness is established only when teachings from the prior art would have suggested the claimed subject matter to a person of ordinary skill in the art. Applicants submit that the two-step polymerizing process of Clark which requires a secondary flash removing step does not teach or suggest the one-step crosslinking or polymerizing process of the present invention that by itself produces clean edged moulded articles. Moreover, Clark does not even recognize the edge-forming utility of controlled impingement of the polymerizing radiation, and such utility of controlled impingement can only be found in the present Specification. Consequently, Applicants submit that Clark, which produce moulded article with a two-step polymerizing process and an edge

trimming process, does not make *prima facie* obvious the present one-step polymerizing and edge-forming process.

The Examiner stated in the Office Action at page 2, "... to produce the molding in Clark et al with no burr or flash would have been obvious if desiring to do so." (emphasis added) Applicants submit that the Examiner's statement is based on the Applicants' own disclosure. There is no recognition or desire in Clark that suggests what present Applicants have accomplished, i.e., one-step polymerizing and edge-forming moulding process. Applicants respectfully submit that in hindsight and once Applicants' invention is disclosed, it is plausible to characterize Applicants' novel approach as being obvious since Applicants approach requires less steps and is a conceptually simpler process than that of Clark. However, Applicants submit that such a hindsight analysis of obviousness is not a proper standard for finding obviousness in the context of 35 U.S.C. § 103.

In summary Applicants submit that the Examiner has not established a *prima facie* case of obviousness and Claims 1-5, 8-40, 42-61, 63-81 are not obvious over Clark or Clark in view of EP 404,015. Applicants respectfully request reconsideration and withdrawal of the rejections set-forth in the Office Action. Should the Examiner believe that a discussion with Applicants' representative would further the prosecution of this application, he is respectfully invited to contact the undersigned.

Please address all correspondence to Michael W. Glynn, Ciba-Geigy Corporation, Patent Department, 520 White Plains Road, P.O. Box 2005, Tarrytown, NY 10591-9005 Please address all telephone calls to the undersigned at the number given below.

The Commissioner is hereby authorized to charge any other fees which may be required under 37 C.F.R. §§1.16 and 1.17, or credit any overpayment, to Deposit Account No. 07-0590.

Respectfully submitted,

Michael U. Lee
Registration No. 35,240
(770-418-3173)

Date: 5/16/96

Ciba-Geigy Corporation
Patent Department
520 White Plains Road
P. O. Box 2005
Tarrytown, NY 10591-9005